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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EDELMAN, BRADLEY E

ART UNIT PAPER NUMBER

2153

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41

Please find below and/or attached an Office communication concerning this application or proceeding.

SC

Office Action Summary

Application No.

08/865,962

Applicant(s)

NIELSEN, JAKOB

Examiner

Bradley Edelman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40,41 and 43-65 is/are pending in the application.
- 4a) Of the above claim(s) 48-52 and 59-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40,41,43-47 and 53-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 1997 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Applicant's request for continued examination (RCE) and amendment filed on December 23, 2003. Claims 40-47 and 53-58 are presented for further examination. Claims 1-39 have been canceled, and claims 48-52 and 59-65 have been withdrawn from consideration as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 53 and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Dan et al. (U.S. Patent No. 5,802,301, hereinafter "Dan").

In considering claim 53, Dan discloses a method for allocating communications bandwidth across a communications interface of a computer, comprising the steps of:

Providing information to a plurality of users connected to the computer across the communications interface (col. 4, lines 33-35);

Receiving a request for data from one of the plurality of users over the communications interface (col. 4, lines 41-43, "NEW REQUEST"); and

Reallocating bandwidth assigned to the plurality of users based on the request (col. 4, lines 53-61, "REBALANCING EXISTING LOADS ON DISKS," wherein the disks initially reserve certain of their bandwidth to be allocated to users, and wherein that bandwidth is reallocated, or "rebalanced" when new user requests are received), wherein the request indicates a data type associated with data requested in the request for data (i.e. the requests are for multimedia files, and file requests inherently indicate the type of file requested).

In considering claim 58, Dan further discloses that the bandwidth is reallocated dynamically (the sections cited above – col. 4, lines 34-61 – describe a dynamic process).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 40, 41, 43-47, and 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dan et al. (U.S. Patent No. 5,802,301, hereinafter "Dan"), in view of Astle et al. (U.S. Patent No. 6,396,816, hereinafter "Astle").

In considering claim 40, Dan discloses a computer apparatus for allocating communications bandwidth, comprising:

A computer having a communications interface for sending information over a communication link (col. 4, line 34, "video file server 60"); and

A program running on said server to permit said computer to act as a server (inherent), the program when running, enabling the computer to reallocate bandwidth assigned to users (col. 4, lines 53-61, "REBALANCING EXISTING LOADS ON DISKS," wherein the disks initially reserve certain of their bandwidth to be allocated to users, and wherein that bandwidth is reallocated, or "rebalanced" when new user requests are received);

The computer reallocating bandwidth in response to a request for data ("NEW REQUEST") from one of the users over the communications interface (col. 4, lines 34-35, 42-47).

However, Dan fails to disclose that reallocation is based on a data type associated with the data requested in the request for data. This is because Dan only describes in depth a video server for use with the bandwidth allocation system. However, Dan does suggest that the system can be used for "multimedia" files in general (see Abstract; Claims). Consequently, the use of bandwidth allocation schemes for servers that serve audio, video, and other types of files and data, and particularly the feature of allocating bandwidth according to a type of data requested, is well known, as evidenced by Astle. In a similar art, Astle discloses a bandwidth allocation system in a network, wherein bandwidth is allocated to system users according to the type of data requested (col. 7, lines 5-11, 20-26, wherein bandwidth is allocated according to "information type," and on "priority" according to the information type, - i.e. "bandwidth

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is allocated based on priority, namely in the following order: audio, control data and video"). Given the teaching of Astle, a person having ordinary skill in the art would have readily recognized the desirability and advantages of including audio and other types of data in the system taught by Dan, and then allocating the server bandwidth in the system taught by Dan according to the types of data requested, to give users access to a wider array of information, and to more efficiently allocate available bandwidth to better support real-time, interactive communications (see Astle, col. 2, lines 28-30). Therefore, it would have been obvious to include audio and other data in the system taught by Dan, and to allocate bandwidth in the system taught by Dan according to the types of data requested, as taught by Astle.

In considering claim 41, as discussed with regard to claim 40, Astle discloses allocating bandwidth to users based on the types of data each is requesting from the server (col. 7, lines 5-11, 20-26, "allocated based on... audio, control data, and video"). In addition, Astle discloses that bandwidth is allocated to the users based on a number of users (col. 7, lines 5-11, 20-26, wherein bandwidth is allocated based on the number of users – i.e. dividing the remaining bandwidth "evenly among the terminals" requires the knowledge of the number of terminals requesting data). Thus, it would have been obvious to a person having ordinary skill in the art to additionally allocate bandwidth in the system taught by Dan and Astle, according to the number of users, to give users equal access to data, and to more efficiently allocate available bandwidth to better support real-time, interactive communications (see Astle, col. 2, lines 28-30).

In considering claim 43, Dan further discloses that the reallocation of bandwidth occurs in response to reception of a GET request over the communication interface (col. 4, lines 42-43, wherein the request is to access information in the server).

In considering claim 44, Astle further discloses that each type of data has an associated priority (col. 7, lines 7-11, "the remaining bandwidth is allocated based on priority, namely in the following order: audio, control data and video").

In considering claims 45 and 46, Dan further discloses detecting when a user is unable to receive information at a rate allocated to that user, and as a result, excluding that user from reallocation of available bandwidth (col. 5, lines 5-24, wherein if there is not enough bandwidth available to service the user's request, the user request is rejected and the user is excluded from obtaining reallocated bandwidth).

In considering claim 47, Dan further discloses that the bandwidth is reallocated dynamically (the sections cited above – col. 4, lines 34-61 – describe a dynamic process).

In considering claim 54, claim 54 presents no further limitations over claims 40 and 41 combined, and is thus rejected for the same reasons.

In considering claim 55, Dan further teaches that the reallocation occurs in response to the occurrence of an event (i.e. data request, col. 4, lines 41-44).

In considering claim 56, Astle further discloses that each type of data has an associated priority (col. 7, lines 7-11, "the remaining bandwidth is allocated based on priority, namely in the following order: audio, control data and video").

In considering claim 57, Dan further discloses detecting when a process is unable to receive information at a rate allocated to that process, and as a result, excluding that process from reallocation of available bandwidth (col. 5, lines 5-24, wherein if there is not enough bandwidth available to service the user's request to process information, the user request is rejected and the process is thus excluded from obtaining reallocated bandwidth).

Remarks and Response to Arguments

- a. Note: The previous rejections made regarding the Hou et al. reference (U.S. Patent No. 6,324,184) have been withdrawn because the priority date for the Hou et al. reference is September 4, 1998, which is subsequent to the priority date for the present application.
- b. Applicant has argued that the combination of the Dan and Hou references does not disclose reallocating bandwidth according to type of data requested. Examiner

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agrees, and has applied the Astle reference in rejecting claim 40. Note that claim 53 does not require reallocating bandwidth according to type of data requested, but only requires that the request indicates a data type. For this reason, claim 53 is rejected in view of Dan alone.

c. Note on the phrase "reallocate bandwidth assigned to users connected to said server."

This phrase, as used in the claims does not limit the claimed invention to requiring that particular users are each assigned a particular bandwidth. The phrase is not so narrow. Instead, the phrase, as broadly interpreted, simply requires that the server system assigns some amount of bandwidth to the users *as a whole*. The system taught by Dan discloses that the server reserves a certain portion of its bandwidth for users who request multimedia files, and further discloses that the bandwidth is "rebalanced" upon receipt of a new request from a user. See col. 4, lines 32-61. As such, the claimed feature is anticipated by Dan.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

For all After Final papers: (703) 746-7238.

For all other correspondences: (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Bradley Coleman

BE

March 16, 2004